UPPER TRILBY WASH FCD GAGE ID #73807

STATION DESCRIPTION

<u>LOCATION</u> – The gage is located in the upper part of the Trilby Wash watershed. The station location is on Trilby Wash approximately 2.2 miles north of Castle Hot Springs Road, and approximately 7 miles northeast SR 74. The gaging equipment is located on the east bank of Trilby Wash, somewhat hidden by vegetation. Latitude N33° 57' 37.5", Longitude W112° 31' 45.2". Located in the SW1/4 NE1/4 SW1/4 S12 T7N R3W in the Red Picacho 7.5-minute quadrangle.

ESTABLISHMENT – Gaging was established on September 26, 2001.

DRAINAGE AREA – The drainage area is about 3.1 mi².

<u>GAGE</u> – The gage is a pressure transducer type instrument. The PT diaphragm is at elevation 0.90 feet gage height, levels of December 1, 2022.

There is one crest-stage gage at this location. The pin elevation is 2.01 feet gage height, levels of December 1, 2022.

There is no staff gage at this location.

ZERO GAGE HEIGHT – Is defined as one foot below the installed elevation of the pressure transducer diaphragm. Zero gage height elevation is 3,030.533 feet NAVD88, levels of February 21, 2018.

HISTORY – No previous gaging history at this location. Transducer re-secured on July 14, 2010. Elevation changed to 0.90 feet gage height, as surveyed January 5, 2011.

<u>REFERENCE MARKS</u> –

RM-UTRLBY is an FCD brass cap located on the east bank terrace near the station standpipe. It is at elevation 12.587 feet gage height and 3,043.120 feet NAVD88, levels of February 21, 2018.

RM-1 is a rebar located on top of the left bank in the gage cross section. It is at elevation 12.024 feet gage height and 3,042.557 feet NAVD88, levels of February 21, 2018.

RM-2 is a rebar located at the right bank in the gage cross section. It is at elevation 7.940 feet gage height and 3,038.473 feet NAVD88, levels of February 21, 2018.

RM-3 is an old sign rail stake on the right bank. It is at elevation 13.399 feet gage height and 3,043.932 feet NAVD88, levels of February 21, 2018.

RP-1 is the sign rail stake most streamward that secures the transducer gage. It is at elevation 1.623 feet gage height, levels of February 21, 2018.

RP-2 is a chiseled 'X' on a pinkish rock located at the toe of the right bank in the gage cross section. It is at elevation 2.116 feet gage height, levels of February 21, 2018.

There are seven monumented cross sections. Only the left bank stake at the gage cross section has been tied to gage height. Not surveyed on January 5, 2011.

<u>CHANNEL AND CONTROL</u> – The main channel is composed mostly of gravels with some sand, with few cobbles. Near the gage, the main channel is less vegetated, whereas upstream at the top of the reach about 1,200 feet upstream, the channel is more vegetated and the channel material is coarser. Both overbanks throughout the reach are heavily vegetated with thick stands of catclaw, mesquite, and palo verde. The channel is relatively steep since the gage location is in the foothills and near the headwaters of Trilby Wash. Channel is the control for all flows except for very low flows controlled by local riffles. Flow is anticipated to be supercritical due to the steepness of the channel.

<u>RATING</u> – The current rating is Rating #2, applied as of Water Year 2021. The rating is based on survey data from six cross sections surveyed in December 2020. An HEC-RAS model was developed from the survey data. Flow is supercritical due to the steep slope.

<u>DISCHARGE MEASUREMENTS</u> – Direct measurements are not practical, since it would require driving through the wash during in event. Indirect measurements could be made in cross sections 5 through the gage cross section.

<u>POINT OF ZERO FLOW</u> – The PZF is the low point of the wash at the gage cross section. The PZF elevation is approximately 0.5 feet gage height, levels of December 2022.

<u>FLOODS</u> – The peak discharge of record was 412 cfs at 2.40 feet gage height and it occurred on July 18, 2015.

REGULATION – None known

DIVERSIONS – None known

<u>ACCURACY</u> – Fair

UPDATE December 21, 2023

D E Gardner